Graphics Verification November Results

Measures Used

2 x 2 Contingency Table

Observations \ Forecasts	Yes	No	
Yes	A	B	C = A +B
No	D	E	F = D + E
	G = A + D	H = B + E	I = C + F

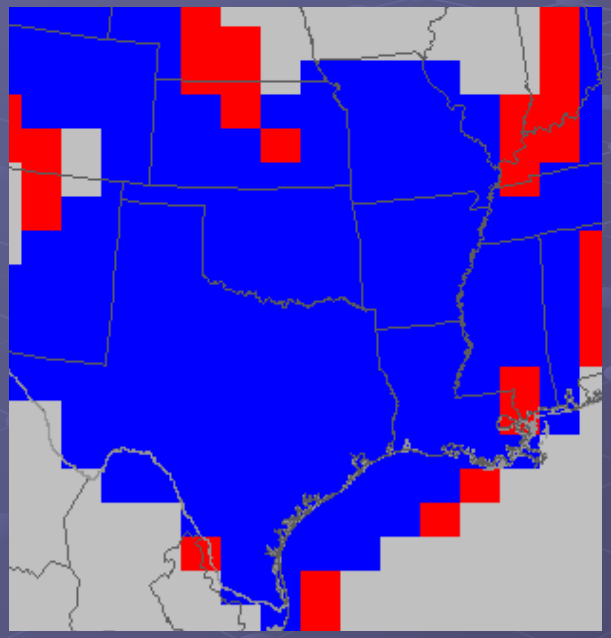
- **Chi-Square** – used to test for statistical significance. Answers the question, “Do we have a large enough sample to know our results are conclusive?”.
- **Heidke Skill Score** – used to test whether we are beating persistence or climatology.
- **Bias** – used to determine whether we are over-forecasting or under-forecasting.

HWD Results

Period: 01-30 Nov 02

12 Hr Forecast

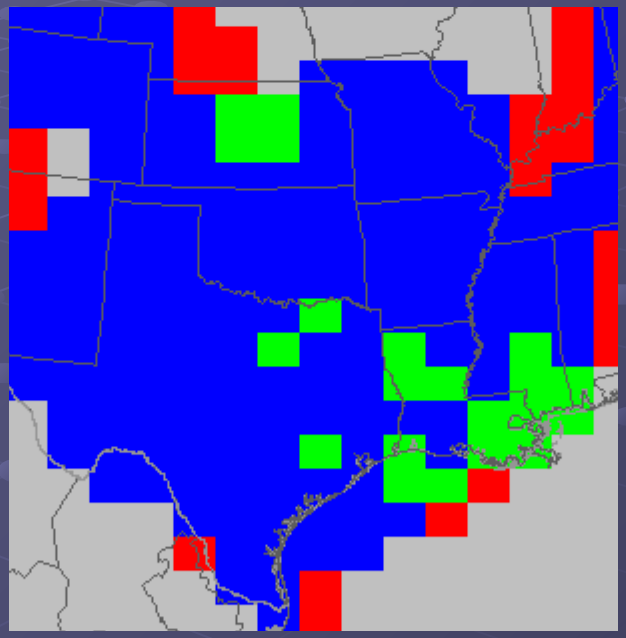
CHI-SQUARE



Hypothesis: Are forecasts related in a meaningful way to corresponding observations?

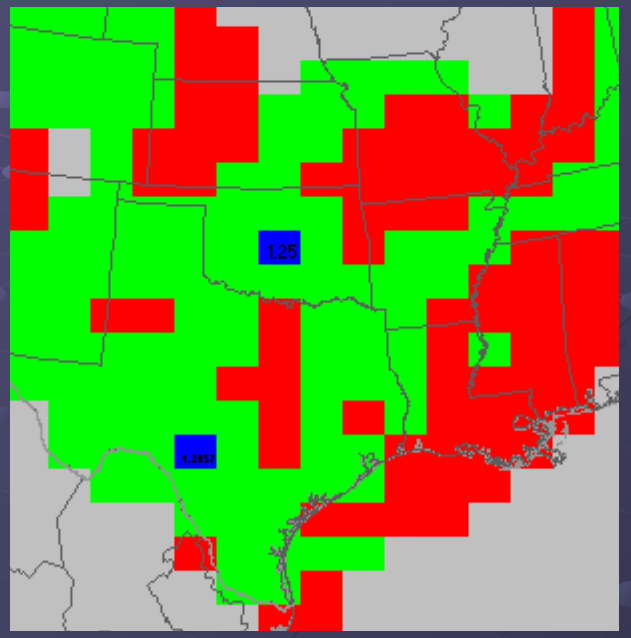
- Yes (p<.05)
- No (p>.05)
- Insufficient Data

HEIDKE SKILL SCORE



- Strong Skill (hss>.5)
- Weak to Moderate Skill (0<hss<.5)
- No Skill (hss< 0)
- Insufficient Data

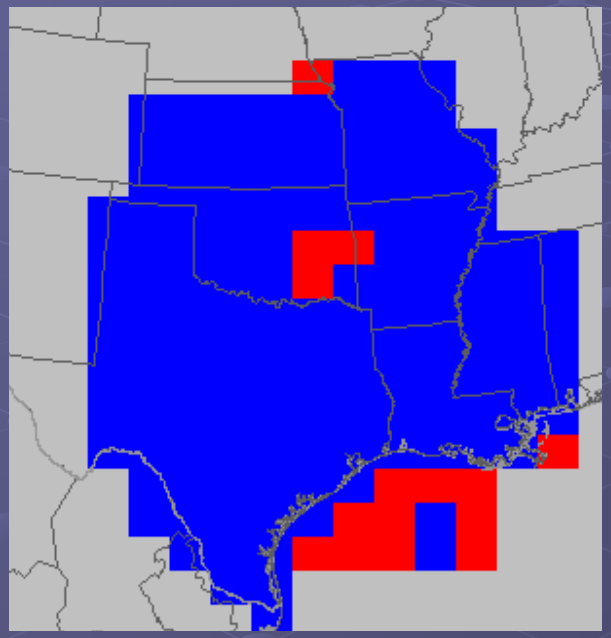
BIAS



- Over-Forecast (bias>1.2)
- No Significant Bias (.8<bias<1.2)
- Under-Forecast (bias< .8)
- Insufficient Data

24 Hr Forecast

CHI-SQUARE



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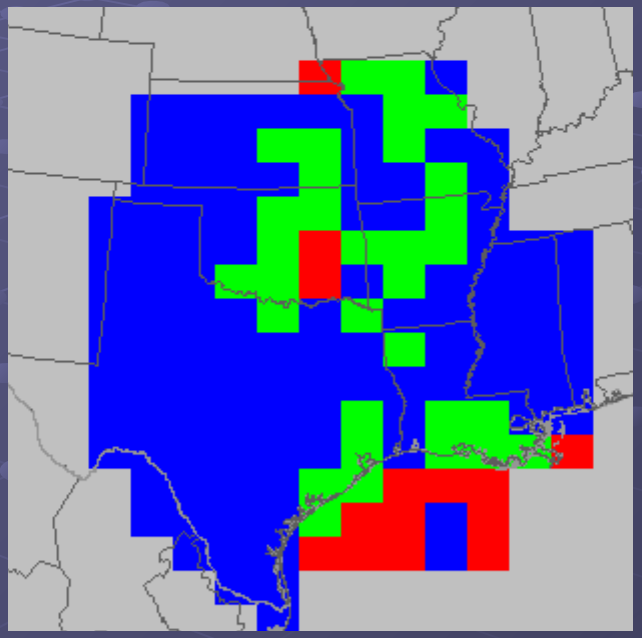
HEIDKE SKILL SCORE



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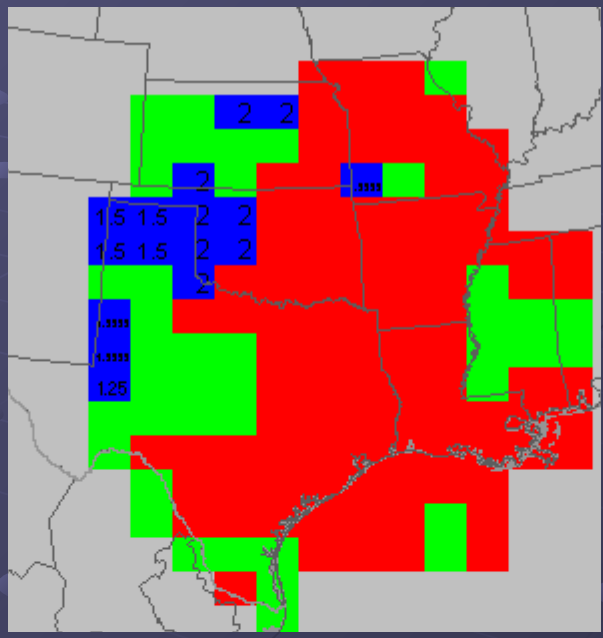
- Insufficient Data

BIAS



- Over-Forecast (bias>1.2)
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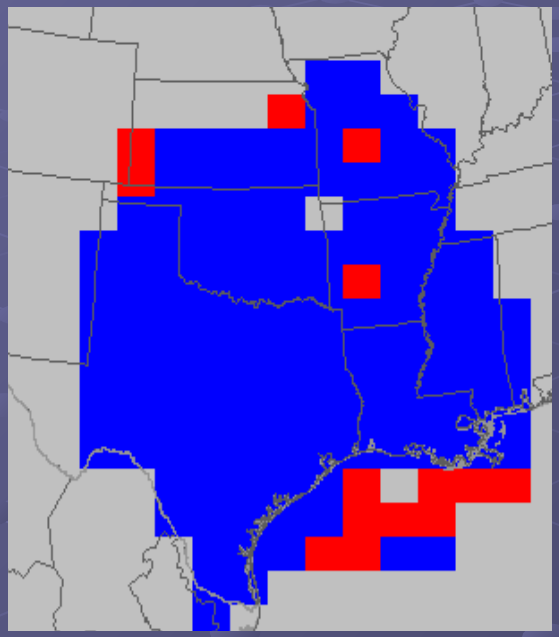
- Under-Forecast (bias< .8)
- Insufficient Data

48 Hr Forecast

CHI-SQUARE



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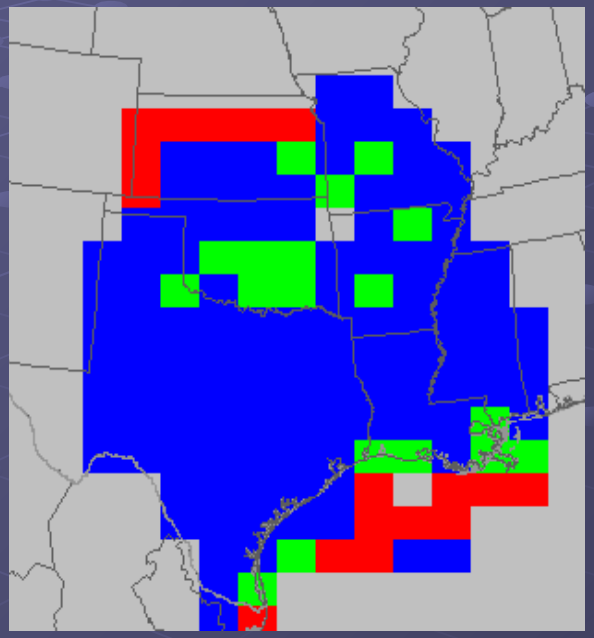

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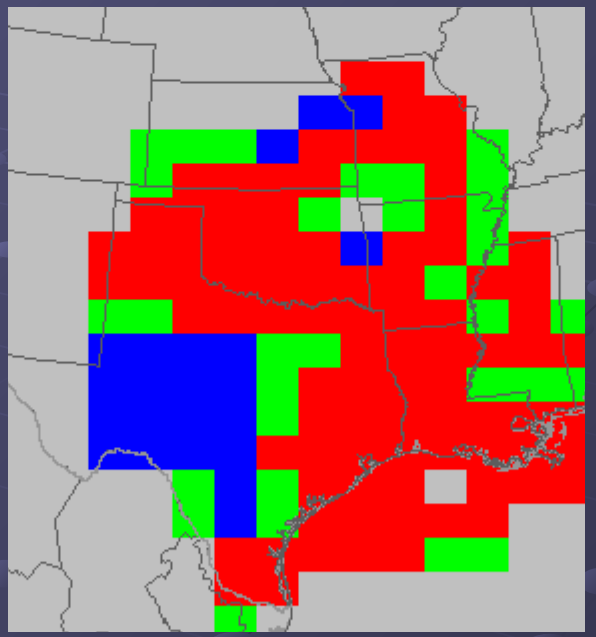

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- Under-Forecast (bias< .8)
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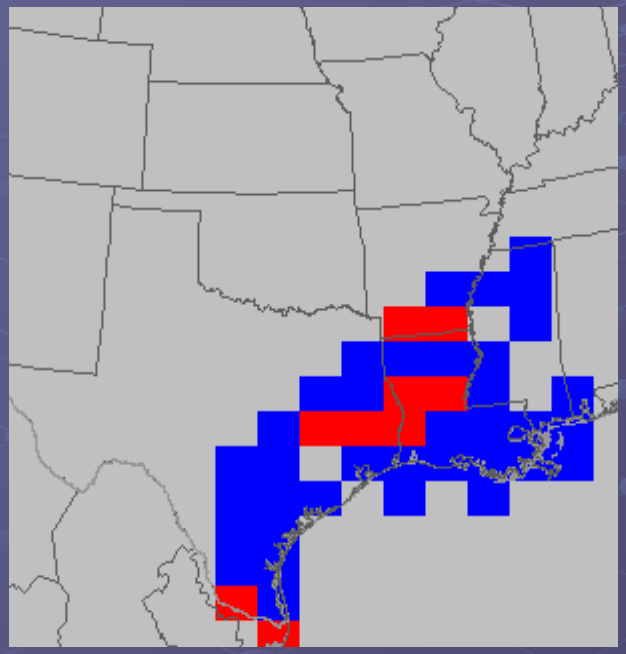
Thunderstorm Results

Period: 01-30 Nov 02

12 Hr Forecast

CHI-SQUARE



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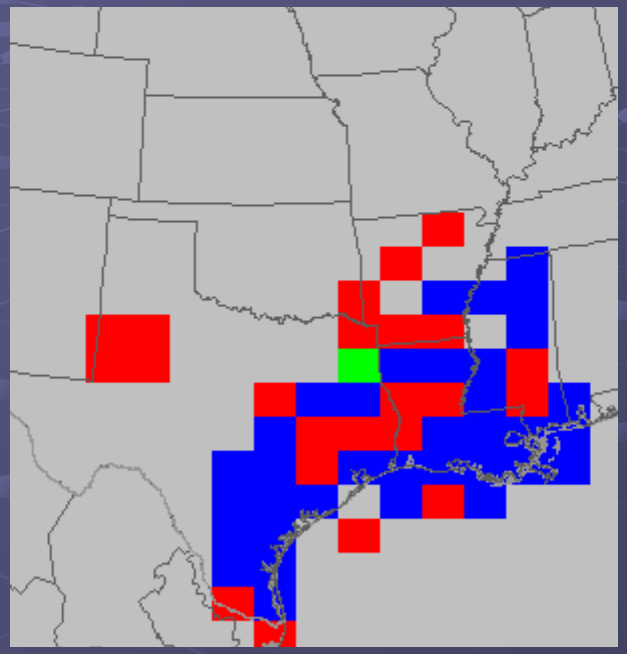
HEIDKE SKILL SCORE



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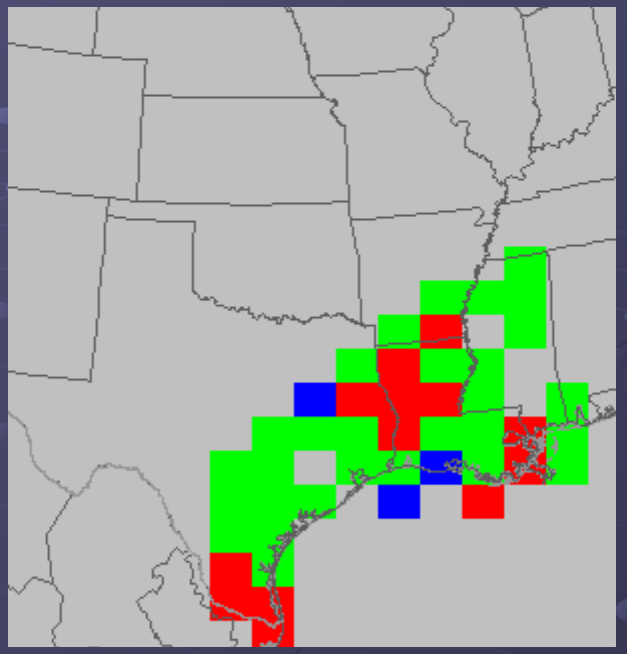
BIAS



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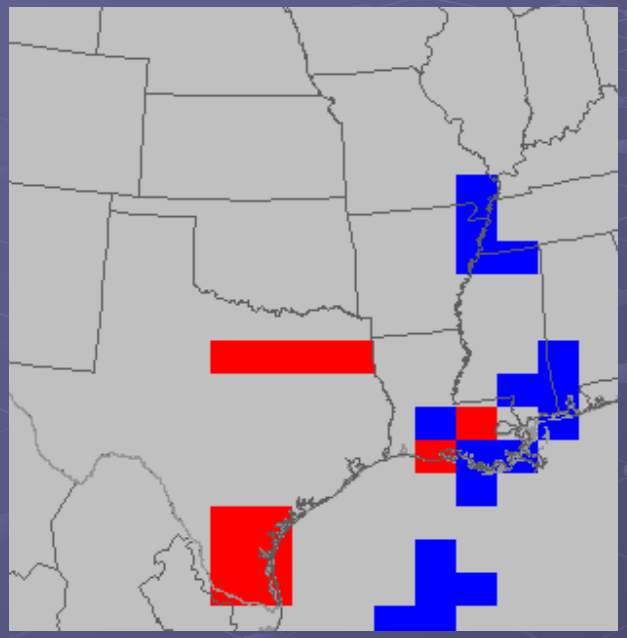
24 Hr Forecast

CHI-SQUARE



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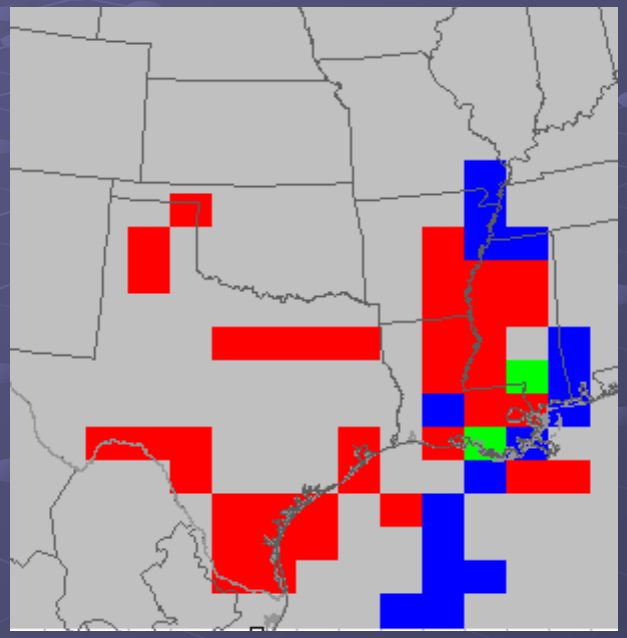
HEIDKE SKILL SCORE



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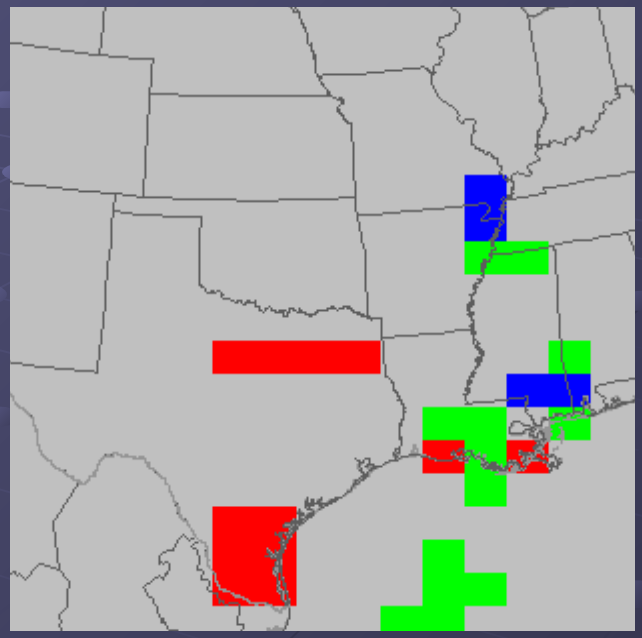
BIAS



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48 Hr Forecast

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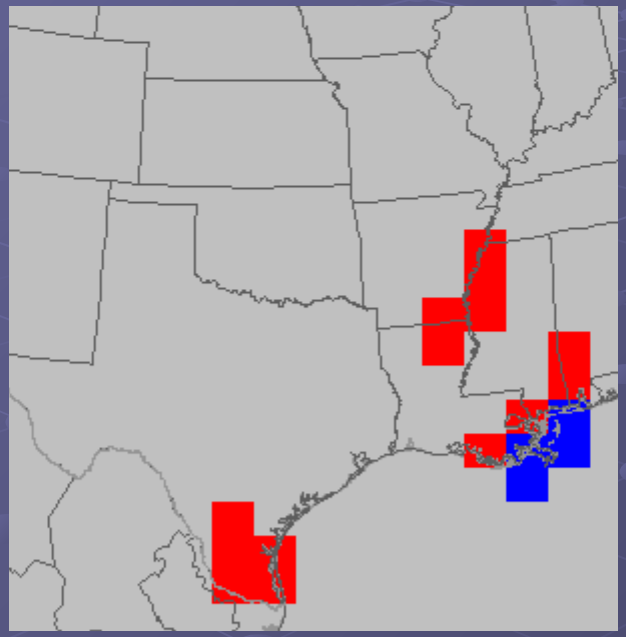

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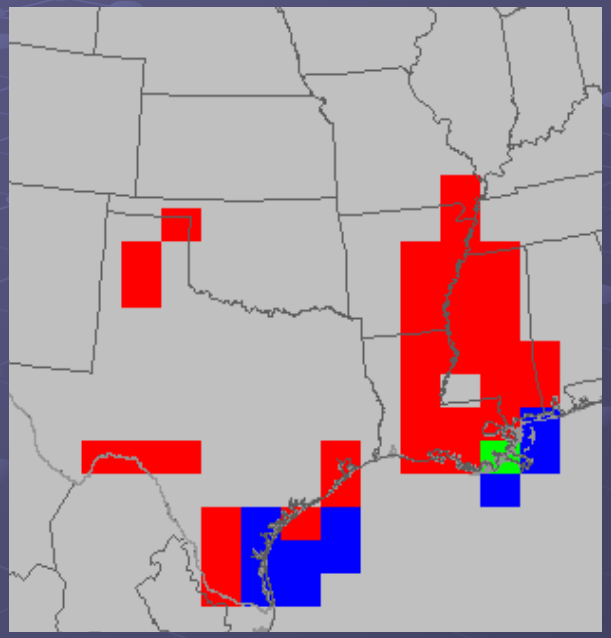

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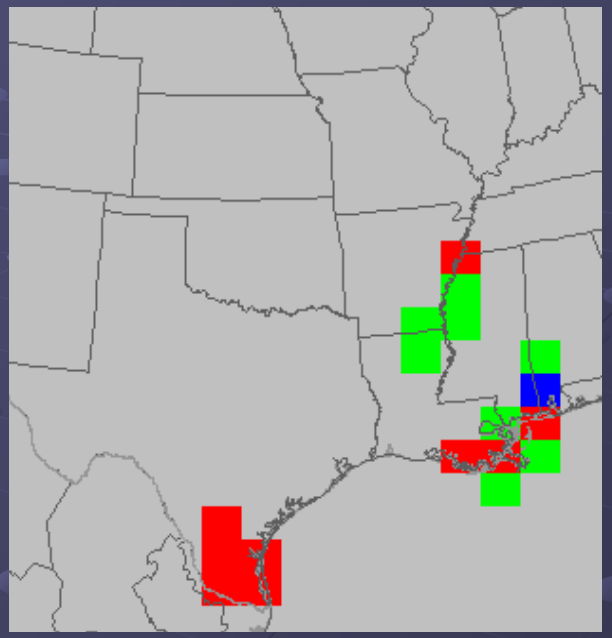

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